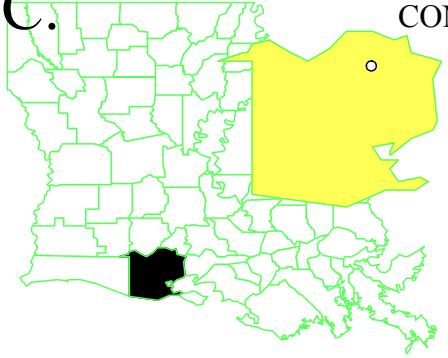


**D.L. MUD, INC.**  
**LOUISIANA**  
EPA ID# LAD981058019



**EPA REGION 6**  
**CONGRESSIONAL DISTRICT 07**  
Vermilion Parish

Other Names:  
Galveston-Houston Yard

No update scheduled.

## Site Description

---

- Location:** 2.5 miles southwest of Abbeville, Louisiana.  
1.5 miles west of Vermilion River.  
Adjacent to Gulf Coast Vacuum Services Superfund Site.
- Population:** 2600 residents within 3 miles of the site
- Setting:** Inactive drilling mud facility and a vacant lot, approximately 12.78 acres.  
Approximately 2,600 people obtain drinking water, and about 1,000 acres are irrigated, from private wells within three miles of the site.  
9,000 acres are irrigated with potentially threatened surface water.
- Hydrology:** Possible surface drainage to Le Boeuf Canal, Coulee Galleque, and eventually to Vermilion River.  
Average of 20 feet of alluvial terrace deposits overlie the shallow sand aquifer that is used for drinking water and irrigation.

## Present Status and Issues

---

- The site is now in operation and maintenance. Ground water monitoring is being conducted quarterly.
- Activities associated with the five-year review began on December 11, 2002.

## Wastes and Volumes

---

### Principal Pollutants:

- Mercury, chromium, arsenic, lead, zinc, barium.
- Petroleum related hydrocarbons.

### Volume:

- Residual barium contamination at a depth of 2 feet in soil (approx. 20,000 cubic yards of soil).
- Tentatively identified hydrocarbon contaminants in three abandoned pits (approx. 1100 cu. yds.).

- 1.3 million pounds of solids and 14,800 gallons of liquids from the tanks were disposed and the tanks were dismantled in 1987.

## Site Assessment and Ranking

### NPL LISTING HISTORY

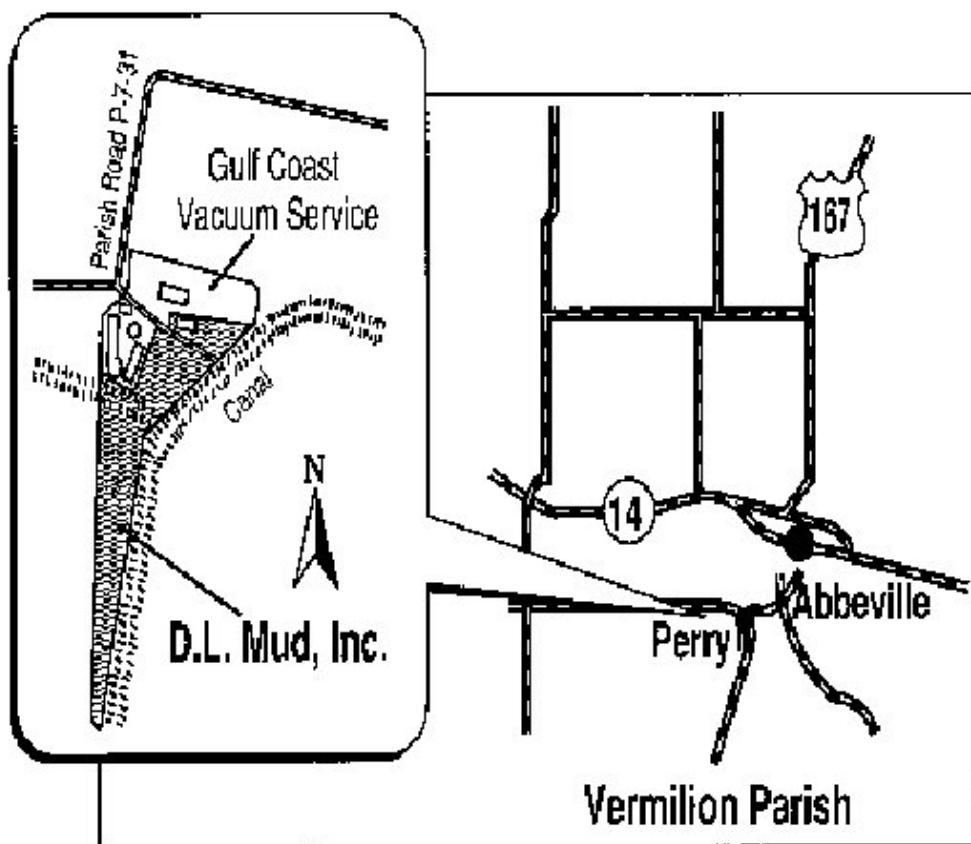
Site HRS Score: 32.37

Proposed Date: 6/24/88

Final Date: 10/4/89

A former owner, Dowell-Schlumberger, commented that the score should be lowered because it conducted a cleanup at the site. EPA responded that, even though the Louisiana Department of Environmental Quality (LDEQ) accepted the cleanup as sufficient for a proper closure, it occurred after the ranking system had taken place and therefore would not affect the score.

## Site Map and Diagram



## The Remediation Process

---

### Site History:

- 1969-1980: (prior to division of the 25.56 acres of property), the portion of the property that later became the D.L. Mud site was used as a barium sulfate based drilling mud storage and formulating facility. Drilling muds and fluids were stored in 16 on-site tanks.
- Oct 1, 1980: Galveston Houston Fluid Services sold 12.78 acres to Gulf Coast Vacuum Services, Inc.
- Feb 11, 1981: Remaining 12.78 acres sold to Dowell Division of the Dow Chemical Company (Dow).
- May 1983: Debris and some contaminated soils were removed by Dow.
- Apr 1984: Ownership transferred from Dowell Fluid Services to Dowell Schlumberger, Inc. (DSI)
- Mar 1985: Sold by DSI to D.L. Mud, Inc., which went out of business in 1986.
- Apr 1987: Dow/DSI removal action conducted with LDEQ's supervision.
- Jul 1987: 1.3 million pounds of solids and 14,800 gallons of liquids from the tanks were disposed and the tanks were dismantled. Soil was excavated from the tank bases and from the south end of the property.
- Dec 1992: Findings from the Remedial Investigation indicate low level risks still on site.
- Nov 1993: Responsible Parties conducted a Feasibility Study to address low level risks.
- Apr 26, 1994: Proposed Plan describes EPA's preferred alternative of institutional controls (deed restrictions, fencing) to address low level risks from residual surface soil contamination and excavation and off site disposal of subsurface soil contamination associated with the pit bottoms.
- Sept. 1994: Record of Decision describes the selected remedy (EPA's preferred alternative) and responds to public comment on the Proposed Plan.
- Mar 19, 1998: Consent Decree (CD) lodged by DOJ.
- Apr 15, 1998: CD entered by the court.
- June 16, 1998: EPA issues authorization to proceed with Remedial Design/Remedial Action (RD/RA).
- October 1, 1998: EPA approves the RD/RA Workplan.
- October 14, 1998: Remedial Action begins with the sampling of the ground water.
- October 21, 1998: Soil Remediation begins.
- October 26, 1998: Bottom-of-pit confirmation soil samples were taken.
- November 18, 1998: Pre-Final Inspection completed.
- February 18, 1999: Final Inspection completed.
- June 21, 1999: Remedial Action Report accepted and Operation and Maintenance begins. Ground water monitoring for Target compound List (TCL) volatile organics (VOCs), TCL base neutral/extractables (SVOCs) and total and dissolved Total Analyte List (TAL) metals will be conducted quarterly and site inspections will be conducted annually.
- June 30, 1999: Close Out Report Completed

- August 12, 1999: Site Completion Ceremony
- January 7, 2000: Public comment period begins for deletion process.
- February 12, 2000: Public comment period ended. No comments were received.
- March 7, 2000: The site was deleted from the National Priorities List.
- August 9, 2000: The first Annual Report of Site Conditions. Based on the Annual Report (1999/Year 1) submitted by the PRPs, site inspections are conducted annually, and the ground water monitoring sampling remains quarterly, however the parameters have been changed to TAL total metals and TCL SVOCs.
- April 2, 2002: Annual Report of Site Conditions 2000/Year 2 (Revision 2). Based on the Annual Report (2000/Year 2), TCL SVOCs were no longer required to be sampled.
- 2001 Sampling: Subsequent 2001 sampling indicated that the TAL metals list could be reduced to the following: Arsenic, Barium, Chromium, Iron, Lead, Manganese, Nickel, and Vanadium.
- June 14, 2002: Annual Report of Site Conditions 2001/Year 3
- December 11, 2002: Five-year Review activities began. Site visit completed on January 27, 2002.

## Health Considerations:

- Potential for contamination of water supply used as drinking water for 2,600 people and of surface water to irrigate 9,000 acres.
- Potential risk to future residents from residual surface soil contamination.

## Other Environmental Risks:

- Potential for contamination of Vermilion River, which flows to the Gulf of Mexico.

## Record of Decision

---

Signed: September 22, 1994

- Institutional controls to address low level risks from surface soil contaminated with residual barium.
- Excavation and off site disposal of contaminated sludges and subsurface soils.
- Ground water monitoring to ensure that residual barium contaminants left on site do not migrate into usable drinking water sources.
- Remedy cost estimate: \$410,000 (assuming contingency measures need not be implemented).

### Other Remedies Considered and Reason Not Chosen

- |                           |   |
|---------------------------|---|
| 1. No Action              | Does not meet long-term effectiveness and permanence.             |
| 2. Soil Capping           | Effectiveness and cost not justified against selected remedy.     |
| 3. Barium Treatment       | Potential implementation problems and high cost.                  |
| 4. Biological Landfarming | Potential implementation problems and questionable effectiveness. |

### **Community Involvement** ---

- Community Involvement Plan: Developed 11/90
- Open houses and workshops: 9/90, 10/93, 8/95, 7/96
- Proposed Plan Fact Sheet and Public Meeting: 4/94, 5/94
- ROD Fact Sheet: 3/95
- Milestone/Status Fact Sheets: 5/90; 12/93, 7/96, 10/98, 8/99, 1/00
- Citizens on site mailing list: 334
- Constituency Interest: Citizens supportive of EPA's efforts.
- Site Repository: Vermilion Parish Library, 200 North Street, Abbeville, Louisiana 70511

### **Technical Assistance Grant** ---

- Availability Notice: 08/04/89
- Letters of Intent Received: 08/20/89
- 1) Vermilion Association to Protect the Environment (VAPE)
- Final Application Received: VAPE submitted final application for grant on 6/1/90.
- Grant Award: 9/27/90; The initial three-year budget period was extended through 9/30/96, and a second extension was prepared by VAPE to utilize the remaining grant funds.
- Current Status: VAPE selected Wilma Subra as the Technical Advisor on 12/31/90.
- 12/7/99: TAG closed.

### **Contacts** ---

|                           |  |
|---------------------------|--|
| Remedial Project Manager: | Katrina Coltrain, 214-665-8143, EPA (6SF-LP) |
| State Contact:            | Rich Johnson, 225-765-0487, LDEQ             |
| Community Involvement:    | Katrina Coltrain, 214-665-8143, EPA (6SF-LP) |
| Attorney:                 | I-Jung Chiang, 214-665-2160, EPA (6RC-S)     |
| EPA Ombudsman:            | Arnold Ondarza 1-800-533-3508, EPA (6SF)     |
| Prime Contractor:         | URS  |
| Oversight Contractor:     | None   |

## **Enforcement**

---

- RI/FS General Notice/104(e) letters issued August 1989.
- RI/FS Special Notice Letters issued December 1989.
- Administrative Order on Consent requiring PRPs to conduct RI/FS was signed June 21, 1990.
- RD/RA Special Notice Letters issued April 25, 1996.
- CD lodged March 19, 1998 and later entered on April 15, 1998.

## **Benefits**

---

- Selected remedy at the site eliminated exposure of barium residuals in approximately 20,000 cubic yards of surface soils and 1,100 cubic yards of pit bottoms contaminated with tentatively identified organics.
- Remediation of wastes conforms to appropriate provisions of Louisiana Statewide Order 29-B Pit Closure Requirements.
- Installation of ground water monitoring wells ensures long-term protection of usable drinking water sources and irrigation water for 1000 acres of croplands.
- The removal of soils, muds, and solid waste by the PRPs and LDEQ in 1987 eliminated the major sources of contamination and reduced the potential of exposure to contamination at the Site.
- The remedial action successfully removed 3,830.37 tons of non-hazardous stained soils and 532 tons of non-hazardous rubbish and debris.